

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking Regarding Policies,
Procedures and Rules for Development of
Distribution Resources Plans Pursuant to Public
Utilities Code Section 769.

(U39E)

**Rulemaking 14-08-013
(Filed August 14, 2014)**

**COMMENTS OF PACIFIC GAS AND ELECTRIC COMPANY
(U 39 E) ON ASSIGNED COMMISSIONER'S RULING RE
DRAFT GUIDANCE FOR USE IN UTILITY AB 327 (2013)
SECTION 769 DISTRIBUTION RESOURCE PLANS**

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DATED: December 12, 2014

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I. INTRODUCTION

Pursuant to the revised schedule for comments issued by the Chief Administrative Law Judge on November 26, 2014 in Rulemaking (R.) 14-08-013, Pacific Gas and Electric Company (“PG&E”) provides its comments on the Assigned Commissioner’s Ruling entitled “Draft Guidance for Use in Utility AB 327 (2013) Section 769 Distribution Resource Plans” (“ACR”).

PG&E commends the Assigned Commissioner and Commission staff for providing the ACR for comment on an expedited schedule. The July 1, 2015 statutory deadline for submission of utility Distribution Resources Plans (DRPs) under Public Utilities Code Section 769 is already a very ambitious, expedited schedule, and so the early guidance provided by the ACR is much appreciated and will help the utilities and all interested parties meet the July 1 deadline in a comprehensive and collaborative manner.

In addition, PG&E also appreciates that the ACR for the most part adopts the “scenario-based” and “tool-based” approach that is consistent with the statutory criteria in Section 769 and PG&E’s earlier comments in this proceeding. This approach is similar to the approach adopted by the Commission to guide the utilities’ Smart Grid Deployment Plans under Public Utilities Code Section 8360, and should be workable and informative for the DRPs in this proceeding.

For convenience of review, PG&E's comments below are organized under Parts 2, 3 and 4 of the Attachment to the ACR, entitled "Draft Guidance Document."^{1/}

II. GENERAL COMMENTS ON PARTS 2, 3 AND 4 OF DRAFT GUIDANCE DOCUMENT

The ACR's Attachment, entitled "Draft Guidance Document," should begin with and follow the requirements of Public Utilities Code Section 769. Per Section 769, the purpose of DRPs is to "identify optimal locations for the deployment of distributed resources," and to do so using objective cost-effectiveness criteria, including avoided or increased costs and benefits attributable to the location of distributed resources. (Public Utilities Code Section 769(b)(1), (3), (4); (c).) In addition, similar to the Smart Grid Deployment Plans, once a DRP is filed and approved by the Commission, any utility requests for additional spending or investments to implement the DRP must be filed and reviewed in the utility's next General Rate Case, where the spending and investment may only be approved if the Commission concludes that "ratepayers would realize net benefits and the associated costs are just and reasonable." (Public Utilities Code Section 769(d).) The process and content for DRPs provided in Parts 2, 3 and 4 should reference and focus on the specific procedural and substantive requirements of Section 769 for each guidance element.

The overall emphasis of the Draft Guidance Document should be on development of DRPs that refine and improve existing tools and create new tools as necessary to support distribution planning that identifies optimal locations for DER in a transparent and publicly accessible manner.

^{1/} PG&E provides no detailed comments at this time on Part of the Draft Guidance Document, because the content of Part 1 contains certain suggestions that are largely aspirational, normative and outside the scope of the requirements of Public Utilities Code Section 769. PG&E recommends that the parts of Part 1 of the Draft Guidance Document be deleted that suggest that the results of the DRPs will be a re-design of the electric distribution system to achieve certain "parallel goals" that are not referenced in Section 769. (Draft Guidance Document, pp. 4- 5.)

III. COMMENTS ON PART 2 OF DRAFT GUIDANCE DOCUMENT – PURPOSE AND SCOPE OF GUIDANCE

Part 2 of the Draft Guidance Document provides that the scope of the DRPs is the low-voltage electric distribution system, and not the electric transmission grid. (ACR, p. 2; Draft Guidance Document, pp. 10- 13.) In addition, the Draft Guidance Document also identifies various pending CPUC proceedings that overlap with the scope of DRPs and therefore need to be coordinated with the development and review of DRPs. (Draft Guidance Document, p. 11.)

PG&E agrees with the “electric distribution system” proposed scope of the DRPs, as well as the need for coordination between the DRPs and other related pending Commission proceedings.^{2/} However, given that the DRPs are fundamentally “plans” to guide the development of future tools, tariffs and investments to support the optimal location of DER, the DRPs by definition will take into account various inputs and policies from other CPUC proceedings. This is how the interested parties in the Smart Grid Deployment Plan proceedings managed the inter-dependencies with other Commission policies and proceedings – each Smart Grid Deployment Plan included a “baseline” assessment of other Commission proceedings and programs that formed the pre-existing foundation for future Smart Grid investments and programs.

In this way, interested parties did not need to be concerned regarding whether the Smart Grid Deployment Plans conflicted with or superseded other Commission proceedings; by definition, the Smart Grid Plans included a proposed reconciliation with existing “baseline” programs and proceedings in order to avoid conflict or duplication. PG&E recommends a similar approach for the DRPs in this proceeding.

This is particularly important because two ongoing CPUC proceedings provide direct inputs and policies that affect the DRPs in this proceeding: (1) the existing decisions in all the IOUs’ General Rate Cases regarding approved and funded electric distribution planning practices

^{2/} As a technical matter, PG&E’s distribution system goes from 4kV-21kV as opposed to “4kv-16kv” referenced in the Draft Guidance Document.

and criteria; and (2) the IOUs' forecasts and assumptions regarding the amount of DER included in the IOUs' Bundled Procurement Plan Updates in the Long Term Procurement Plan proceedings.

IV. COMMENTS ON PART 3 OF DRAFT GUIDANCE DOCUMENT – COORDINATION AMONG IOUS, STATE AGENCIES AND THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR

Part 3 of the Draft Guidance Document identifies the need for coordination on the DRPs among the IOUs, state agencies and the California Independent System Operator (CAISO). (ACR, p. 2; Draft Guidance Document, p. 13.) In addition, Part 3 provides that, while the IOUs are developing their July 1 DRP filings, the Commission staff and stakeholders will continue to schedule workshop and other informal activities to provide further guidance on the DRPs. (Draft Guidance Document, p. 13.)

PG&E agrees with the need for coordination of DRPs with the grid safety and reliability issues within the jurisdiction of the CAISO, particularly safety and reliability issues relating to the determination of optimal locations for DER under Section 769. The CAISO should play an “ex officio” advisory role in evaluating the impact of utility DRPs on the overall reliability and safety of California’s bulk power system, and in advising on the tools and scenarios that should be used to develop the DRPs.

PG&E also welcomes continued informal guidance and input from Commission staff and interested parties as the DRPs are drafted for filing by July 1. However, the schedule for filing the DRPs is very tight, and once the Commission finalizes its Draft Guidance, the utilities will need to concentrate their efforts on the development and drafting of their respective DRPs consistent with the guidance. PG&E recommends a revised comment schedule in accordance with Section 769, where informal input for the Commission staff and interested parties is communicated prior to the Commission’s adoption of the Draft Guidance Document, and resumes once the DRPs are filed on July 1, 2015.

V. COMMENTS ON PART 4 OF DRAFT GUIDANCE DOCUMENT – GUIDANCE ON CONTENT OF DRPS

As a threshold matter in comments on Part 4, PG&E recommends that the terminology and definitions to be used in the DRPs should be clarified as follows:

- **Transmission System:** 60 kilovolts (kV) and above. Generally consists of electric power lines and associated equipment that transmit electric power from substation to substation and have limited numbers of customers directly connected.
- **Distribution System:** 4 kV – 21 kV. Mainly consists of electric power lines and associated equipment that transmit electric power from substation to customers with the majority of customers connected by medium voltage service transformers.
- **Circuit/Feeder:** Terms reference all the lines beyond one protective breaker at the substation serving a subset of customers connected to that substation. When referring to analysis at the feeder level, we see this as an analysis that will be conducted using aggregate numbers viewing the feeder as a single node.
- **Distribution Line Section:** Term refers to subsections of the circuit. Analysis at line section levels will provide results on specific interconnection points within the circuit.

The content of Part 4 specifies certain requirements for the content of DRPs, including, *inter alia*, “a) the development of Integration Capacity and Locational Value Analysis tools; b) the development of Demonstration projects; c) the provision of data access; d) an assessment of tariff and contract implications; e) the identification of safety considerations; f) the description of barriers to Distributed Energy Resources deployment; g) an explanation of how the DRP filings will be coordinated with the Utility general rate cases; and h) a description of proposed next steps.” (ACR, p. 2; Draft Guidance Document, pp. 15- 26.) In addition, the Draft Guidance Document includes several proposed definitions to guide the metrics used in the DRPs, including

definitions of “optimal locations,” “locational values and benefits,” and “cost effectiveness.” (Draft Guidance Document, pp. 27- 29.)

For the most part, Part 4 of the Draft Guidance Document accurately follows the statutory criteria for DRP “deliverables” in Public Utilities Code Section 769, using scenario analysis and analytical tool development. However, Part 4 should recognize that the DRP itself establishes a long-term plan that will deliver a vision, strategy and roadmap for review and approval by the Commission in the DRP proceeding and subsequent General Rate Cases. Given this role for the DRPs and the expedited schedule for submission of DRPs, PG&E will have a minimal amount of datasets and tools to be able to deliver some elements of an initial framework of DRP methodologies under existing GRC approved costs and programs. For initial identification of enhanced all-encompassing DER analytical methods, PG&E will apply a semi-heuristic approach in its July 1 DRP.

For example, the proposed July 1, 2015, “deliverables” of circuit-by-circuit detailed planning data, as well as other “tools” and analyses, will be based on an initial framework of methodologies that will be further developed and implemented after the DRPs and associated incremental funding are approved in the DRP proceeding and subsequent GRCs. Development of robust final products and tools will be an essential element of the dynamic non-heuristic strategy and roadmap in the DRP, but the development of effective and user-friendly products and tools will require time and effort as PG&E transitions from a current nascent state to the future mature state. Thus, any specific analysis or study that is due by July 1st under the Draft Guidance will not be as detailed as indicated in Part 4.

For example, to accomplish the goals set forth in the guidance for the Integration Capacity Analysis, the initial set of results may be in the form of a ranked list of feeders displaying results. Publishing to an online map may take some extra time and be geared towards feeder level results. Inclusion of capacity, protection system limits and power quality will be limited to circuit level results and may not be achieved down to the line section level, if that is the level desired by the Draft Guidance Document.

As its planning tools identified in the DRP are approved by the Commission and enhanced, PG&E can move these methods down to the line section level for a more advanced analysis. Accordingly, the Draft Guidance Document should be revised to provide a phased approach to complete these tasks under the DRPs.

In the first phase, included in the DRPs, initial semi-heuristic methodologies will be identified and evaluated for a system-wide analysis. In the second phase, upon approval of the DRPs, the development of the non-heuristic tools, with the ultimate methodology to be used for DER integration and planning, can be completed. This phased approach includes useful and available information in the DRPs, but allows time after approval of the DRPs to ensure that the methodology for determining integration capacity is accurate and workable for future use.

Similarly, the DER “scenarios” proposed in the Draft Guidance seem inconsistent with the forecasts and scenarios identified in PG&E’s updated LTPP filing and approved methods for distribution planning over 3- 5 year time frames. Instead of dictating particular DER market penetration scenarios in the Draft Guidance Document, the Draft Guidance Document should allow the IOUs to use more realistic scenarios in their DRPs that are consistent with a range of likely scenarios used for overall forecast distribution and capacity loads based on the best information available to the IOUs at that time..

Similar to Part 1, Part 4 of the Draft Guidance Document also appears to focus on normative data on distribution costs that may be avoided by DER, but excludes development of objective data on costs caused by DER. For example, the Commission’s November 24, 2014 D.14-11-042 in R.11-05-005, reflects a general consensus that renewable generation, including solar PV, can result in increased costs associated with flexible capacity requirements.^{3/} The Draft Guidance Document should be revised to provide this more objective cost-benefit and cost effectiveness content required by Section 769.

^{3/} D.14-11-042, p.55.

PG&E also requests that the Draft Guidance Document be revised to clarify the definition of “circuit level” for the Integration Capacity Analysis. PG&E understands this to mean that “quantity” values provided would be a single value per circuit, not values for all of the “nodes” or line sections. PG&E will require time and GRC approved investments to enhance its tools in order to implement a non-heuristic dynamic node-level approach for system wide assessment. Likewise, regarding the Locational Benefit Analysis Tool, the Draft Guidance should clarify what specific Operations and Maintenance (O&M) costs are assumed to be avoided by DERs, if any.

For the demonstration section of the DRP, under “Demonstrate the Optimal Locations Benefits Analysis Methodology,” the guidance specifies that the Locational Benefit Analysis must be “linked to a known transmission system benefit.” This appears to be a typographical error and intended to mean “distribution system benefit” instead. PG&E also requests that the scope of the demonstration be in terms of substations and limited to a couple substations. Each IOU has a different definition with regards to Distribution Planning Areas where the substation designation will be consistent. On the data access elements of the DRP, PG&E agrees that the DRPs should evaluate the data types suggested by the Draft Guidance Document. The DRPs will then identify which categories of data can be made available, which cannot, and which are not yet available but could be developed under the approved DRPs.

The Draft Guidance Document also indicates that the DRPs should be updated biennially, while at the same time coordinated with utility GRCs as required by Section 769. The biennial updating does not comply with the 3-year GRC cycle required for approval of DRP spending and investments under Section 769. Accordingly, PG&E recommends that the Draft Guidance Document be revised to provide that the DRPs be updated in each utility’s subsequent GRCs, where the updated plans and associated spending requests can be considered as required by Section 769, without duplicative CPUC proceedings.

VI. COMMENTS ON DEFINITIONS

In addition to the comments above that relate generally to definitions and the statutory criteria applicable to DRPs under Public Utilities Code Section 769, PG&E provides the following comments on the definitions provided in the Draft Guidance Document at pages 27-29:

- The proposed multiple criteria for the definition of “optimal location” create some confusion over how the multiple criteria are to be applied objectively to determine the rank order and degree of optimality of various, diverse DER locations, including criteria not tied to or quantifiable as avoided costs, such as “social equity” benefits. For example, how should the criteria be weighted? Do all six criteria apply to all locations? In order to reduce this confusion, PG&E recommends that the definition of “optimal location” focus on the actual statutory definition in Section 769, which is “reductions or increases in local generation capacity needs, avoided or increased investments in distribution infrastructure, safety benefits, reliability benefits, and any other savings the distributed resources provides to the electric grid or costs to ratepayers of the electrical corporation.” (Public Utilities Code Section 769(b)(1).) This definition is grounded in traditional avoided cost and incremental cost methodologies that are quantifiable and tied to direct utility costs of service to all ratepayers. This definition is also consistent with how the Commission evaluates utility costs and investments in General Rate Cases, and aligns with the statutory “just and reasonable costs” and “net benefits” criteria for review of utility DRP costs and investments in General Rate Cases in Section 769(d).
- The definition of “cost effectiveness” in the Draft Guidance Document appears to focus only on benefits and costs to the customer owning or receiving service from the DER, rather than the avoided and incremental costs to all utility ratepayers. Section 769 and the Commission’s traditional “just and reasonable” test for evaluating utility investments and costs of service require that costs be evaluated

from the perspective of all ratepayers who incur the system-wide costs, not just customers directly benefiting from a particular utility expenditure or investment. Likewise, the draft definition references the possibility that existing cost-effectiveness tests used by the Commission for this purpose “may be insufficient to fully characterize the locational value of DERs.” For purposes of the DRPs, PG&E recommends against attempting to develop new definitions of “cost-effectiveness,” “avoided cost,” and incremental costs that are not consistent with the definitions that the Commission has used in other proceedings, including in General Rate Cases to evaluate the overall reasonableness of various electric distribution investments and capacity additions.

VII. CONCLUSION

PG&E appreciates the Draft Guidance Document provided in the Assigned Commissioner’s Ruling, and looks forward to adoption of the Draft Guidance Document by the full Commission consistent with PG&E’s recommendations and revisions in these comments.

Respectfully Submitted,

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